CONTINUOUS PROFESSIONAL DEVELOPMENT OF SCHOOL TEACHERS IN INDIA: LEARNING FROM INTERNATIONAL SUCCESSES

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ABSTRACT

Professional development of teachers refers to the procedures and ways of assisting the teachers in constant renewal of their knowledge base and honing their skills to adjust to the emerging needs and changing situations of the teaching profession. While professional development includes both pre-service(preparation for the teaching profession) , continuous professional development of teachers refers to the in-service teacher education programs meant for development and professional growth within the realms of this profession. The paper discusses in brief the scenario of teacher professional development in the country along with some chief problems uncovered through researches made in the area of teacher education and professional development of teachers in India. Further, five international models of continuous professional development namely the MiTEP, the Ramp and Pathways, the Quest , the CCM and the Wyoming Triad model, have been discussed in brief that have provided a number of strategies and techiniuques of teaching and learning that can be implemented in the Indian system of professional development of teachers and some of them have been listed in the paper.

KEYWORDS: Continuous professional development, School teachers, learning ,International, Successes.

Introduction:

Professional development of teachers is undoubtedly an aspect that cannot be ignored if importance is attached to the development of standards of education in any country as the both are integrally linked with one another. Students benefit more from teachers who are not only qualified and experienced but at the same time always have an updated knowledge base .To impart such an education to the teacher educators and consequently to the students they teach, we need enrichment programs from time to time for teachers. Even if a profession has people with the required qualifications and experience to stay in the job but no opportunities to improve, update and increase knowledge base with changing time and growing needs, it affects their and also the institution's performance adversely. Hence is the need for constant renewal and up gradation of skills to suit the growing or changing needs and avoid any kind of stagnation. Continuous Professional development is specifically targeted towards the same. Feiman-Nemser (2001) have rightly pointed out "In an era of changing demands on teacher, it is inappropriate to structure teacher development as a single period of teacher education at the start of a career."There has been a debate since long on whether a profession like teaching should encourage a flow of fresh new blood into the field along with updated training and new skills or should stick to people with a huge working experience and an ability to deal with problems that they have been dealing since ages?. The fact remains that we do need the fresh '*just out of colleges people*' with bursts of energy and enthusiasm unmatched with the old ones, but at the same time we can't ignore the expertise and experience held by the experienced professionals. Thus it is essential to keep training both the novice as well as the old professionals to update and adjust according to evolving needs and situations. Thus Professional development of teachers will always remain an important process as well as product for teachers.

Fullan (1995) defines professional development as "the sum total of formal and informal learning pursued and experienced by the teacher in a compelling learning environment under conditions of complexity and dynamic change."

Researchers have time and again reported that there is a lot of confusion over the use of terms CPD (Continuous Professional Development ,Professional Development and INSET)and that not much consensus is available on the meanings of these terms. People have interchangeably used these words in their researches writings and have different understanding with regard to this. Law, Sue, Glover, Derek (1996)have mentioned in their book '*Managing Professional Development in Education':*

• "There has been much debate over specific definition of CPD and no single or agreed definition exists."

• "The rapidly changing nature of development of practice and process has undoubtedly influenced both the meaning and use of these terms". (Staff development, INSET, CPD and teacher development). e.g. Fullan uses these terms interchangeably".

After reading different literature on CPD, we can infer that professional development for teachers in general includes pre-service and in-service teacher training programmes but when we talk about continuous professional development of teachers, we refer primarily to the in- service teacher training programs held for working teachers only. Hence while the goal of professional development is com-

mon to both in-service and pre-service programs, INSET is more like a process and CPD or Continuous Professional development is more like a product.

Professional development of teachers in India:

Professional development has always been given importance in India since a long time. Even during the Vedic period, extension activities such as yatras and kathas for teachers were organized although they were not as structured and systematic as the programs in the present times. At present the continuous professional development for teachers is organized in the name of INSET or In -service Teacher training .

The following models of CPD are in practice in India:

a) Cascade model: In this model a group of teachers attend the professional development programme.The training provided is intensive and focuses on few skills in general and is imparted by the teacher educators of institutions like DIETS, SCERTs etc. who are known as the '*master trainers'* in the program. Later the participants or the trainees come back to their work environments as "*champion teachers*" or "*a vanguard team*" and provide the same training to their peer teachers. This model is time and cost effective and is advantageous with regard to support provision at school level and helps disseminate information to the largest number of teachers.

b) Reflective Teaching Model: This model is based on the principles of constructivism. In this model, the teachers in pairs are required to create a model of teaching through discussions and then reflect on their own practice. This is followed by a question answer round and discussion on the topics .This kind of teaching that involves co-teaching or shared teaching encourages reflection in planning and debriefing. The CPD programs conducted by the British Council in India are based on this principle.

c) Split model: This model is similar to the reflective model. First, training is received at the block level and then it is disseminated to schools .A group of teachers attend the workshops or seminars on professional development that continues for a week and then implement the ideas or practices learnt for two to three months and then attend a follow-up program .

d) Site based models: As the name suggest this model of professional development is practiced in schools among the teachers. This model is generally involves locally based providers and teachers in facilitation, instruction, content, curriculum assessment and technology. A common example of such a model is the system of action researches carried out by teacher educators in schools. SCERTs conduct action researches using the same principle in many schools.

e) Self- directed model : In this model, the teachers attempt to develop themselves as teachers by their own efforts such as reading books, taking memberships of various libraries, using ICT such as accessing online programmes etc. but unfortunately it mostly exists in an unorganized form in our country with a lack of database and evaluation procedures. In other countries such as United Kingdom we have it in the form of personalized CPD but a sound system of evaluation is also available there.

Agencies of professional development:
The main agencies of professional development in India are DIETS SCERTS, IASES, NUEPA , NCERT, KVS, Extension Education Centres. Etc.

Modes of professional development in India:
The common modes of professional development for teachers in India are: Workshops,Seminars,Conference,Studygroups,Experimentalschools,Correspondencecourses, Radio broadcasts, Films, Extension activities, Field activities etc.

Problems in the present system:
The Indian system of professional development for teachers has not been problem free. Luckily we have researches been conducted from time to time on the same and some have been considered for this paper. A lot of researchers have pointed out the major flaws in the existing system of Continuous Professional Development.

A position paper submitted to MHRD(2011) has reported the following flaws in the present system of professional development in India:

• Top down approach in the present cascade model of CPD has been ineffective in bringing positive results.

• Feedback and evaluation are poor in continuous professional development programs.

• Teachers who are already under a rigid hierarchy and administrative rather than academic issues find it difficult and demotivated to attend professional development programs.

• There is nothing to ensure that what is learntby the teachers in these programs actually reaches the schools and students.

Other researchers such as Ranganathan (1992), Paranjpeand Sandhya (1997), Shyni Duggal (2005.), S.K.Yadav (2012) and many more in their researches on In-service Teacher Education have reported that the following problems exist in the

• Less involvement of teachers in evaluation and planning

• Low satisfaction among the participants.

• Programs do not cater to Special education needs.

• Feedback and follow up is weak.

• Reflective practice is absent in most programs.

• Constructivism as envisaged by (NCF2005) not realized

• Absence of concept of multiple intelligences

• Tackling learning difficulties were rated low.

Learning from international successes:
A look into some successful international models of CPD enables us to understand and grab their positive and novel features and imbibe in the Indian context. A brief description of five such successful models is presented here. Only those five models have been studied and described in brief that have been actually implemented and proved to e successful and very popular among the participant teachers. Evidence of satisfaction among the participants and stories of their success is available in abundance about these models , though not provided in this paper. Strategies and methodologies of these models have been derived to be applied in Indian professional development programs. Hence effort has been made to contextualize the in the Indian context.

The international successful models of CPD selected for study are as follows:
1. **Michigan Teacher Excellence Programme (MiTEP)**: A CPD model of Japan, it has been improvised and implemented and has shown remarkable results in USA.The key features of this model are collaboration, lesson study ,critical feedback and follow up , structured guided lessons and a cyclic study of planning, observation and discussion of research lessons followed by modification and re-teaching of those lesson plans.

2. **Quality Elementary Science Teaching (Quest):** A collaboration between the University of Missouri and St.Louis School in USA, this CPD model is designed to deepen teacher's understanding and experiences. A two week programme, this model divides the day into the morning and afternoon shifts .The first week is devoted to enriching subject knowledge and concepts in mornings and Seamless teaching and teaching Through 5 E learning in the afternoons. The second week is devoted to the implementation of what has been learnt previously through this model in the morning sessions followed by discussions and reflections among teachers in the evening sessions.

3. **The CCM Model –Wyoming Triad Process Model**: Developed by Joseph Stepans at the university of Wyoming, this model is a model in USA that is a collaboration between facilitator, teacher and principal . It is based on the change of concepts of teachers and consequently studentsfrom a phase of preconceptions to awareness of other's views to confrontation of ideasto disequilibrium to new equilibrium. This CPD model is considered to believe in a process of the same than just a workshop as in other models.

4. **Ramps And Pathways Model:** An USA based model of CPD **,** this model is based on the principles of constructivism and propounds active learning not just for students but also for teachers . This trains teachers in teams or groups(collegial approach) under the mentorship of a subject expert and develop strategies to teach in order to encourage students to create ramps through experimentation . Special emphasis is given to observing a child and respecting his or her perspective while he or she creates a ramp.

5. **The Guided Inquiry Lab Model:** A three year CPD model in the USA in collaboration with NSES or the National Science Education Standards for science teachers that focuses on setting up labs by teaming u teachers under the guidance of expert teachers and applying scientific method to train teachers professionally. Teachers formulate hypotheses on various topics in science, conduct various activities and verify the hypothesis and alter or reject the hypothesis based on evidence obtained after experiments and then teach the students through the same methodology.

Strategies derived from the successful international CPD models:
1. Peer coaching: This strategy involves the colleague teachers to come together and jointly plan lessons ,discuss problems and solutions . This may also involve assissting a teacher with problems in a specific area .Normally peer coaching is between teachers of the same status but can also be between an experienced and a novice teacher and between an expert and a novice. This approach has been used in all the above discussed models and leads to sharing of knowledge and experience and is also a component feature of learning communities.

2. Collegial learning: The term collegial means sharing of power in the educational system .Most of the professional development programmes for teachers have adapted the same approach where the teachers passively digest what all is sent throught he authorities. The models of CPD explained in this paper practice collegial learning that brings teachers, admininstrators as well as students (in some cases) to the same level when it is about learning and sharing knowledge.

3. Collaborative learning : A very popular approach to learning almost all the models of CPD have in common ,is the collaborative approach as a way of learning and training the teachers in which the teachers depend on each other's sources, talents, experiences to learn a skill or concept and is largely based on the principles of constructivism.This envisages that learning is better when done together than individually.

4. Inquiry learning: Used by the R&P model of CPD, this strategy is specially effective in science teaching but can be applied to teaching of other subjects as well.

4. Mentoring: A strategy used exclusively in the QUEST Model of CPD, mentoring is based on the concept of apprenticeship where the more knowledgible or expert assissts and guides the novice or the less experienced teacher and evaluates as well as provdes feedback on his or her performance.

5. Modelling: In modelling, a master teacher teaches a topic to a class using various methodologies while being observed by another teacher who is learning the same skills. In this way, teachers can see how the method is used successfully in real classrooms..

6. Research based teaching and learning: Research should not be confined to teacher educators or for the ones who study or teach at the college or university level . Even the school teachers should be encouraged to learn and apply research principles in their teaching and should be trained to conduct researches in their schools.The guided inquiry lab model discussed in this paper employs hypothesis formulation for teaching concepts and trains the teachers to teach in the same way to children. Based on the topic, hypothesis are formulated by the teachers and then observations after experiments yield data that help in the verification of hypothesis.

For example :
• What happens when you mix calcium hydroxide into water ?

a. No reaction
b. Bursts
c. Milky substance
d. Light anf heat produced

• Students will be asked to formulate hypothesis.-choose any one

- They will conduct the experiment – mix calcium hydroxide in water

- They observe the results

- Hypothesis is rejected or modified

Not only the teachers develop a scientific way of teaching through this, the students also learn scientifically through this strategies.

7. Questioning: This strategy has been taken from the Ramp and Pathways structure in which the teacher is provided training to ask questions to children while they actively paticipate in an activity such as creating a ramp structure. This strategy will aid the teacher in helping the child to stay on the right track while at the same time, not interfering with the child's perspective. If the teacher observes that the child's efforts are not in the right direction , he or she will ask questions and will eventually lead to the desired results. Instead of just condemning his actions , the teacher acan ask questions such as " why you doing this way ? what will happen if you do it this way ? etc .

8. Classroom Observations: Observing students to know them better and make records is another strategy the teachers are trained in in these models. The Ramp and Pathways model specially uses this straegy to assess student reasoning and understanding and includes not only watching but also listening carefully to what children say while learning or performing an activity as this helps teachers to understand the perspectives of the cildren and guide them efficeiently.

9. Student interviewing: Just as classroom observation provides the teachers an idea of their perspectives and ways of learning and understanding, similarly interviewing the them (from CCM Model of CDP) provide a lot of information about the previous knowledge and pre –conceptions egarding various topics.

10. Discussions: The above models of CPD call for discussions at every phase. They gives maximum importance to discussions between teachers , between teachers and students and between teachers and administrators. Discussions promote collegial learning and sharing of resources and knowledge and makes teaching and learning not only a fun activity but flexible and free from the top-down approach that has been very prevelant in our country and heavily criticised.

11. Seamless teaching: A concept used by the QUEST CPD Model, this talks of barrier free teaching and learning. In this strategy, the basic observed learning barriers that the students face in classrooms, are removed by methods such as peer coaching , collaboration , mentoring etc. For example , if we have asked students to write a dictation and some face problems in writing, they can be assissted by other members in teams who are good at it and can proceed with the lesson.

12. 5E learning: 5E learning is an established method of lesson planning in science education used by QUEST CPD Model discussed here.It has five phases namely Engage, Explore,Explain,Elaborate and Evaluate. These phases built from student's previous knowledge and add new ideas from firsthand experiments and assist students in enhancing their thinking.

ADVANTAGES OF THESE STRATEGIES:
1. More Autononmy to teachers than organisers**:** These CPD programs give more freedom to participant teachers than the organisers when it comes to deciding what will be the areas where professional training will be and should be imparted by organizing for discussions , collaboration that makes it easier to identify the common gap areas.

2. No ones the boss' approach: With collaboration among all stakeholders , the models are more democratic and no longer like the ones that are based on the top down approach where teachers accept whatever comes from the senior teachers or experts.

3. Self reflection: The models provide ample opportunities for self- reflection by letting the participants decide the areas where they require training .Also the models encourage reflective thinking by training them in inquiry learning and encouraging them to participate in discussions and work in collboration.

4. Long term and intensive training: Almost all the models discussed here have been of long duration and have provided in-depth and intensive training to teachers. Research has shown (provided in the paper) that programs of CPD for teachers that have been of long duration have given positive results in terms of student achievement. *"One shot workshops have never been as successful"(Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009)*

5. Research based lesson planning**:** These models envisage research based lesson planning by the teachers. The teachers will be trained to follow a research methodology in planning lessons in various subjects specially science subjects e.g throwing a situation to students, formulating hypothesis, experimenting and verifying or changing the hypothesis and concluding results.

6. Scientific methodology: All the above mentioned models have features such as inquiry learning, experimentations and research based lesson planning that prepares teachers to think scientifically ad hence consequently transfer the same to the students.

7. Follow up : A very important feature of these CPD models is follow up with the participants which most of the one shot workshops fail to do . Even if they take feedback from the participants, it is immediatelty after the programme and is in an unorganised manner. In these CPD models, interviews and questionnaires are given to teachers when they are done with implementing the learnt strategies in real classrooms.

8. Knowing the subject : Conceptual knowledge cannot be ignored at the same time when it comes to teaching and learning. Although theoretical sessions given through lecture modes have been much into criticism in the recent times, we still believe that we as teachers need to update the knowledge base too along with the strategies keeping into account the ever changing knowledge in the world.

9. Knowing the children better: These CPD models also provides with ample opportunities to observe children and talk of training the teachers to know their children by observing them while they create resources and learn and respect their perspectives as knowing the children better helps teaching them better.

10. Based on the concept of learning commuties: *A recent study in England by the General teaching Council (Goodall, 2005*) reveals that student achievement improved significantly after teachers worked together in CPD programmes they attended.

Almost all the successful CPD models discussed here propound the need and importance and actually practice collaborative approach in their programmes. They believe in building learning communities than learning individuals. leraning communuiteis create ,share and implement knowledge together and develop a network of students, colleagues, administrators and supervisors for support through tutoring, assisiting each other in overcoming learning barriers by forming teams and working in collaboration.

11. Practical approach: By making a programme well suited to the present needs makes it practical without any extra effort and so is the case with this model. The above mentioned models of CPD emphaise on the present problems faced by teachers and call for reports on their self reflections and also later a curriculum is developed based on those needs. This makes the model practical in it's approach.

12. Need based approach: Since the teachers share their experiences and describe what exaclty they expect from the CPD programme, these CPD programmes becomes more need based and connect more with the participant's ideologies and needs. Also the dicussions and lessons plans are implemented in real classrooms during the training sessions which give them a real idea of the pros and cons of the taught strategies.

13. Cater to the diversity in teachers and learners: Since ages the emphasis has been on the individual differences in students and on how to cater to them while teaching, but the saddest part of our education system is that individual differences between teachers are ignored and one-size-fit-all strategies are recommended for them.

Thus these CPD programme keep into account the diverse needs of teachers by providing ample of opportunities for collaboration were the teachers can discuss and share opinions and knowledge , know more about each other. This also reflects in their lesson plans hence catering to the diverse needs of the children they teach.

Suggestions for application in the Indian context based on the above mentioned models
1. Bringing about horizontal learning in place of the top- down approach – a more democratic model: The education system in India is largely a top-down approach , in which the decisions always come down from a higher authority , knowledge always comes from a higher level (status, position and income wise)and is passively transmitted to the learners and so is the case in most professional development programmes where the teachers passively accept the knolwledge from experts in a passive mode in most seminars and workshops. The models of continuous professional development discussed in this paper provide us with a horizontal approach to learning in which the learning takes place together, all stakeholders are brought to the same platform be it the principals, the co-ordinators and the teachers and even the students where they discuss, reflect, express views and ideas together and make the

process of teaching and learning enjoyable.

2. Increasing access to CPD opportunities :The huge population of our country results in burdening the education systems with entrance tests and rigid criterias for almost everything related with education, making opportunities available to only a few and creating a crowd of candidates always competing for admissions. Even the in-service teacher training programs in India are not accessible to all the teachers due to their rigid nature of entrance and eligibility criterias. Thus making these criterias more laxed will ensure more participation of teachers in them will help meeting the objectives of visionary professional development as discussed in this paper soon.

3. Flexibility : All the international models described in the paper had a common element of flexibility . If the professional developemnt programmes have to cater to a large population of school teachers in India, they have to be organised in more flexible ways so that the pressures on teachers to complete syllabus in schools specially in the private sector can be handled well. Distance modes and part time modes are useful in this regard and have been discussed in this paper earlier. Involving administrators in the programs will also help them understand teachers problems.

4. Partnerships : Just as these successful models of CPD , we can also have CPD programs run in partnerships of colleges , universities and schools and even private organizations. This will lead to a more horozontal flow of knowledge and sharing of resources among the stakeolders and also help in their better funding too.

5. Autonomy : Unlike the present systems of professional development where everything from strategies, methodologies, topics, discussed etc. are pre-decided , the need of the houris to give freedom to the teachers to decide which programs of professional developments will they like to attend and what they would like to improve or learn and also allow them to voluntarily participate in CPD programs than making it an obligation. This will help in making the CPD programs more need based and fun.

6. Strenghtening the existing systems- the cascade model: A system that has been in practice since ages cannot be changed suddenly ,even if evidence of its poor functioning is available. The present system of cascading in practise in professional development has been under a lot of criticism but the need of the hour is to wither strengthen it or remove the anomalies present in it. This can be done by adding the strategies discussed above in the existing curriculum .

7. Buiding a database : A sound database for maintaining a record of how many people attended the professional development programme and the details related to it as well as reflections and experiences of teachers should be deveoped. ICT media such as computers, mobiles and applications can be utilised for this purpose and make the process easy.

8. Using ICT for proper follow up and feedback: Follow-up and feed back after attending CPD workshops and in-service training programmes is very important and is a much ignored feature in most of our professional programmes (as has been pointed out by some research studies in this paper earlier). Use of ICT such as mobiles, email, facebook and other social media etc can be used to collect feedback from the participants and also later when they implement the learnt strategies in schools , follow up can be taken instead of losing touch with them as in most cases.

9. Evaluation of cpd programs: All professional development programs should be evaluated and results should be analysed with respect to the achievements in students in various aspects including academics. Evaluation should not be confined to feedback about general satisfaction of the participants but on actual results and experiences after implementing the strategies learnt in the program in real classrooms. The tools can be questionnaire, rating scales, checklists, interviews etc. even students can be interviewed for this purpose.

10. Respecting individual differences within teachers : Teachers like students too have individual differences, likes and dislikes. It is important to cater to these differences and provide them with more autonomy to choose the kind of CPD programme they want to attend.

11. Long term CPD programs: It is a common feature of all the CPD models discussed in this paper and a lot of arguments by various researchers and educationists have been provided to establish that short-term workshops cannot meet the objectives of professional development of teachers and that for these programs to be effective in real sense , they need to be long term and intensive.

12. Teacher support: Supporting the teachers and helping them meeting challenges of teaching such as classroom management, discipline issues , dealing with special children ,guiding the novice teachers through strategies such as peer coaching and mentoring can bring about a more conducive environment for teaching in schools. Research by teachers-Research in education is confined to the purogative of teacher educaors and scholars , it is

hence required that school teachers be trained and encouraged to conduct researches on various problems they face in schools and come up with solutions for the same. Action researches can also be cnducted by the teachers in their schools.

13. Expression- The teachers should be given opportunities to express their views and voice their concerns by encouraging them to write articles , write in publications and publish journals to help create a channel to understand their problems and learn from their experiences. One such example is the annual TESOL Research Network held at the University of Sydney each September; another is the IATEFL Conference in the UK where teachers present their research extensively at local staff or CPD meetings and other national and international conferences.

14. Involving teachers in decision making: When it comes to planning and designing the CPD programs the involvement of school teachers is very less as reported by many studies. It is crucial to involve the teachers in planning of CPD programs. Bruce Alberts of the University Of California has said in this regard "*If you want to know how to make something work better, you go to the people who are doing it as you do in the automobile industry. We learned from the Japanese that you have to go to the people on the shop floor to figure out how to make a better car. Why we continue not to do that in the field of education is beyond me.*"

15. Training teachers to create lesson plans collaboratively: A majority of schools in India have a system of providing structured and prepared lesson plans to teachers and prescribed methods of enforced upon them through the authorities or the management. taking inspiration from the models of CPD discussed, teacher, coordinators etc can be brought together to construct lesson plans together to facilitate best inputs from all.

16. Discussions: A feature that is common to all the models of CPD discussed in this paper i.e discussions ,should be a strategy widely used and taught to the teachers so that they not only learn to discuss among themselves but also apply it in their classromms with their students. This approach helps in facilitating collaboration, helps sharing of ideas and encourages students to respect each other's opinions. It also makes learning fun and easy for both teachers and students.

17. Team teaching: While the present programs train the teachers to teach individually and prepare them for a one to many relationships in classrooms, teachers should be trained to teach together in teams .This would facilitate collaboration and will help making teaching interesting and barrier free as the expertise of all teachers can be put to use together at the same time.

18. Experimentation: Teachers should be encouraged to freely experiment with methods of teaching and help sharing their successes and failures. Autonomy to teachers is required to achieve this and it is a challenge in the Indian scenario where most teachers have to generally follow a prescribed pattern of teaching and adhere to syllabus or rigid lesson plans in schools.

19. Sharing outcomes: The teachers should be allowed to publish their successes and their achievements in their researches and initiatives. This can be done by publishing their articles, journals, and thesis .

20. Sharing knowledge and resources: Often the journals, books and latest learning materials are available to few teachers in schools or only to the college level educators which makes it difficult for immediate use by the school teachers or for immediate use in a classroom .Teachers should share resources with each other without hesitation and for this rigid rules of issue from libraries should be made laxed. Only then can the concept of creating learning communitites can be realised.

21. Celebrating successes: Even the small successes such as building resources, learning materials, student achievement in class tests etc should be celebrated in schools and professional development programs.

22. Seamless teaching: A lot of students have problems with reading, writing or linguistic skills due to which they face problems in understanding the concepts or applying them. Seamless teaching can be applied to teaching students. this has been discussed in details in the paper.

23. Developing learning and teaching materials : Teachers should be encouraged to make their own teaching and learning materials and should also involve students in these activities too. The use of teaching aids should not be confined to B.Ed training courses but should be in use by teachers in real classrooms.

24. Personalized CPD: It is important that teachers take the responsibility of their own professional development rather than being compelled by the authorities. There should be a proper system of carrying out personalized CPD where the teachers take responsibility of their professional development though in an organized way. But this can be effective only if there authenticity in the evaluation of the program.

REFERENCES:

1. Day.,Christopher,Sachs., Judyth. (2004).*"International Handbook on the continuing Professional Development of Teachers"*.McGraw Hill Professional Publishing.

2. Susan, B., Koba.,Yager., Robert.(2013). "*Exemplary Science(2013*): *Best practices in professional development(Revised 2ⁿᵈ Edition).* National Science Teacher Association.USA.

3. Scales & Peter. (2011*).Continuing Professional Development in the Lifelong Learning Sector.* Open University Press.UK.

4. Duggal, S.(2005).*Educating the Teachers.*Atlantic Publishers and Distributers.New Delhi.

5. Broad, K & Evans, M. (October 2006*).A Review Of Literature On Professional Development Content And Delivery Modes For Experienced Teachers.* Prepared For The Ontario Ministry Of Education., university of Toronto . OISE.

6. Gulamhussein, A.(2013) *.Teaching the teachers effective professional development in an era of high stakes accountability."* Center for public education national school boards association.

7. Maheshwari, N. *Assessment and Accreditation in Determination and Maintenance of Norms and Standards for Teacher Education.* Independent study.

8. Vadaya, T.(2014).*Continuing Professional Development of Teacher Educators: Vision and Action.* Position paper submitted to MHRD.

9. Skinnerdon.*Get Set For Teacher Training*.Edinburgh Universitypress.

10. Daniel, A.(2004) . *Teachers Wanted: Retaining Good Teachers.* Association For Supervision And Curriculum(ASCD)

11. Issah, S., Khine, M.,&Myint, S.*Practitioner Research In Teacher Education:Theory And Best Practices.*

12. Day &Christopher(1995) .*Challenges Of Lifelong Learning*. Taylor and Francis press.

13. Maggioli, D & Gabriel.(June 2004).*Teacher-Centered Professional Development* .Association For Supervision & Curriculum Development (ASCD).

14. Earley.,Peter.,Bubb& Sara .(2004) .*Leading And Managing Continuous Professional Developmeny: Developing People, Developing Schools*. Sage publications.

15. Rhoton.,Bowers ,J.&Patrica .(January 2001). *Professional Development : Planning and Design* .National Science Teachers Association.

16. Lynd , M.(2005) .*Fast Track Teacher Training Models For Consideration In Southern Sudan*.Written for the American Institutes of Research and theSudan Basic Education Program, a project funded by USAID .

17. Gandhe, K. (2010) .*Teacher Professional Development In India.* Paper presented at PCF 6, Kochi, India) Theme : Formal Education ,Sub-theme : Revamping Teacher Education.

18. Mulkeen., Adian., Chapman., David., Joan & Jaeghere (2007). *Recruiting, Retaining, Secondary School Teachers And Principals In Sub Sahara Africa*. World Bank Publications

19. Committee On Enhancing Professional Development For Teachers, National Research Council (2007) .*Enhancing Professional Development For Teachers: Potential Uses Of Information Technology , Report Of A Workshop*. National Academies Press.USA.

20. Wendy & Robinson (2014).*Learning Profession? :Teachers And Their Professional Development In England Nd Wales. During 1920-2000.*Sense Publishers.

21. Jackson ,H.,Valerie ., Lewis.,Chance ,W.(2010).*Transforming Teacher Education : What Went Wrong With Teacher Training And How We Can Fix It*. Stylus publishing.

22. Ginsburg, M."*Equip Two State Of The Art Know;Egde In Education , Teacher Professional Development- A Guide To Education Project Design Based On A Comprehensive Literature And Project Review*." USAID.

23. Joseph, H.(Dec 2009).Taking charge of Professional development : a practical model for your school . Association For Supervision And Curriculum Development (ASCD).

24. Law., Sue., Glover., Derek .(1996) .*Managing Professional Development In Education.*

25. Prince ,E& Barrett, A. (2014) .*Introducing innovation through action research in an Australian national programme: experiences and insights.* British Council ,Brand and Design/E16810 Spring Gardens London SW1A 2BN, UK www.britishcouncil.org.

26. Hayes, D.(2014).*Innovations In The Continuing Professional Development Of English Language Teachers.* British Council Brand and Design/E16810 Spring Gardens London SW1A 2BN UK www.britishcouncil.org.

27. Yadav, S . (2012) .*Impact of INSET on classroom SSA INSET Packages in states , an assessment .*NCERT.